

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 98-195

WASTE DISCHARGE REQUIREMENTS
FOR
CITY OF LINDSAY
WASTEWATER TREATMENT FACILITY
TULARE COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board) finds that:

1. The City of Lindsay (hereafter Discharger) submitted a Report of Waste Discharge on 22 June 1998 in support of increase in capacity at its wastewater treatment facility (WWTF). The WWTF is two miles west of the city limits.
2. Waste Discharge Requirements Order No. 93-096, adopted by the Board on 25 June 1993, prescribes requirements for discharge of wastewater from the WWTF. The WWTF consists of a headworks, an oxidation ditch, two secondary clarifiers, five evaporation/percolation ponds, an emergency overflow pond, and sludge drying beds.
3. The Discharger also operates a separate disposal site for disposal of citrus waste, which is governed by Waste Discharge Requirements Order No. 85-233. The Discharger has indicated that it will request revision of Order No. 85-233 to reflect additional flow from a new vegetable processing plant. Two ponds at the WWTF, apart from those described in Finding No. 2, would be used separately for storage and disposal from the vegetable processing plant. These industrial wastewater discharges will be addressed separately and not by this Order.
4. Order No. 93-096 prescribes a flow limit of 1.24 million gallons per day (mgd). Over the last few years, the flows have been steadily increasing at the WWTF. Current flows average around 1.3 mgd. The increase in flow has not caused BOD or solids violations. As a result, the City's consulting engineer has reassessed the treatment capability of the WWTF and certifies that the facility has a capacity to treat and dispose 1.36 mgd.
5. Waste Discharge Requirements Order No. 93-096 requires the Discharger to expand the WWTF to accommodate future flows. The Discharger did not comply with the time schedule on expansion. Along with the Report of Waste Discharge, the Discharger has submitted a proposed time schedule on expansion of the WWTF.

**WASTE DISCHARGE REQUIREMENTS
CITY OF LINDSAY
WWTF
TULARE COUNTY**

-2-

6. Self monitoring reports submitted by the Discharger shows that conductivity (specific electrical conductance at 25°C, also "EC") of the effluent is above 1000 µmhos/cm and significantly higher than the source water EC. Source water for the city is predominantly from water in the Friant-Kern Canal, whose EC is around 30 µmhos/cm. The city also uses a small volume of water from a well, whose EC is about 850 µmhos/cm.
7. The WWTF is in Section 3, T20S, R26E, MDB&M. A map of the area is as shown in Attachment A, which is attached hereto and part of this Order by reference. Surface water drainage is to Hutchinson Ditch. The site lies within the Kaweah Delta Hydrologic Area (No. 558.10) in the South Valley Floor Hydrologic Unit, as depicted on interagency hydrologic maps prepared by the Department of Water Resources in 1986.
8. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition*, (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin. These requirements implement the Basin Plan.
9. The designated beneficial uses of Hutchinson Ditch, a valley floor water, as identified in the Basin Plan, include agricultural supply; industrial service and process supply; water contact and non-contact water recreation; warm freshwater and wildlife habitat; rare and endangered species; and groundwater recharge.
10. Based on the information obtained from the "*Lines of Equal Elevation of Water in Wells in Unconfined Aquifer*," published by the Department of Water Resources in Spring 1996, the depth of groundwater in the region is about 55 feet below ground surface.
11. The beneficial uses of underlying groundwater are domestic, industrial, and agricultural supply.
12. The Visalia Area Soil Survey identifies shallow soils at the disposal area as Madera loam. The surface layer is noncalcareous loam from 10 to 18 inches thick. The subsoil is about 30 inches thick and made up of calcareous clay loam over very limy clay loam and has a slow to moderate permeability. A calcareous cemented hardpan layer about 6 to 10 inches thick is encountered below the subsoil.
13. The Regional Board has considered antidegradation pursuant to State Board Resolution No. 68-16 and finds that the permitted discharge is consistent with those provisions, and is unlikely to cause an increase in groundwater constituents above that of background levels.

**WASTE DISCHARGE REQUIREMENTS
CITY OF LINDSAY
WWTF
TULARE COUNTY**

-3-

14. Annual precipitation in the area is around 11 inches and the annual pan evaporation is around 84 inches.
15. The action to revise waste discharge requirements for this existing facility to reflect its actual treatment capacity is a negligible expansion of its use and is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Title 14, California Code of Regulations (CCR), Section 15301.
16. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
17. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. 93-096 is rescinded and the City of Lindsay, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Bypass or overflow of untreated or partially treated waste is prohibited, except as allowed in Provision E.2 of Standard Provisions and Reporting Requirements.
3. Discharge of waste classified as 'hazardous', as defined in Section 2521(a) of Title 23, CCR, Section 2510, et seq., or 'designated', as defined in Section 13173 of the California Water Code, is prohibited.

B. Discharge Specifications

1. The monthly average discharge shall not exceed 1.36 mgd.
2. The discharge shall remain within the designated treatment and disposal area at all times.

**WASTE DISCHARGE REQUIREMENTS
CITY OF LINDSAY
WWTF
TULARE COUNTY**

3. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.
4. As a means of discerning compliance with Discharge Specification No. B.3, the dissolved oxygen content in the upper zone (1 foot) of wastewater in the ponds shall not be less than 1.0 mg/l.
5. The effluent from the secondary clarifier, prior to discharge to the disposal ponds, shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD ₅ ¹	mg/l	40	80
Total Suspended Solids	mg/l	40	80

¹ Five-day, 20° Celsius biochemical oxygen demand

6. The maximum EC of the discharge shall not exceed 1000 µmhos/cm or the average EC of the source water plus 500 µmhos/cm, whichever is less.
7. Ponds shall not have a pH less than 6.5 or greater than 8.5.
8. Ponds shall be managed to prevent breeding of mosquitoes. In particular:
 - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
 - a. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - b. Dead algae, vegetation, and debris shall not accumulate on the water surface.
9. The ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return

**WASTE DISCHARGE REQUIREMENTS
CITY OF LINDSAY
WWTF
TULARE COUNTY**

-5-

period of 100 years, distributed monthly in accordance with historical rainfall patterns. Freeboard shall never be less than two feet (measured vertically to the lowest point of overflow).

10. On or about 15 October of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification B.9.

C. Sludge Disposal Specifications

1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.
2. Any proposed change in sludge use or disposal practice shall be reported to the Executive Officer and USEPA Regional Administrator at least 90 days in advance of the change.
3. Use and disposal of sewage sludge shall comply with existing federal and state laws and regulations, including permitting requirements and technical standards included in 40 CFR 503.

If the State Water Resources Control Board and the Regional Water Quality Control Boards assume primacy to implement regulations contained in 40 CFR 503, this Order may be reopened to incorporate appropriate time schedules and technical standards. The Discharger is encouraged to comply with the standards and time schedules contained in 40 CFR 503 whether or not they have been incorporated into this Order.

D. Groundwater Limitations

The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentrations statistically greater than background water quality, except for conductivity. Regarding conductivity, the discharge shall not cause groundwater to exceed an incremental increase in conductivity greater than 15 $\mu\text{mhos/cm}$ over the most recent five-year period.

**WASTE DISCHARGE REQUIREMENTS
CITY OF LINDSAY
WWTF
TULARE COUNTY**

-6-

E. Provisions

1. The Discharger shall comply with Monitoring and Reporting Program No. 98-195, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
2. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
3. The Discharger shall implement, as more completely set forth in 40 CFR 403.5, the necessary legal authorities, programs, and controls to ensure that the following incompatible wastes are not introduced to the treatment system, where incompatible wastes are:
 - a. Wastes which create a fire or explosion hazard in the WWTF;
 - b. Wastes which will cause corrosive structural damage to the wastewater treatment units, but in no case wastes with a pH lower than 5.0, unless the treatment units are specially designed to accommodate such wastes;
 - c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of the WWTF;
 - d. Any waste, including oxygen demanding pollutants (BOD, etc.), released in such volume or strength as to cause inhibition or disruption in the WWTF, and subsequent treatment process upset and loss of treatment efficiency;
 - e. Heat in amounts that inhibit or disrupt biological activity in the WWTF, or that raise influent temperatures above 40°C (104°F), unless the wastewater treatment units are designed to accommodate such heat;
 - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the WWTF in a quantity that may cause acute worker health and safety problems;

**WASTE DISCHARGE REQUIREMENTS
CITY OF LINDSAY
WWTF
TULARE COUNTY**

-8-

operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved by the Executive Officer.

7. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
8. A copy of this Order shall be kept at the WWTF for reference by wastewater treatment plant operating personnel. Key operating personnel shall be familiar with its contents.
9. The Board will review this Order periodically and will revise requirements when necessary.

I, GARY M. CARLTON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 23 October 1998.


GARY M. CARLTON, Executive Officer

SH:sh:10/23/98

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 98-195
FOR
CITY OF LINDSAY
WASTEWATER TREATMENT FACILITY
TULARE COUNTY

INFLUENT MONITORING

Influent samples shall be collected at the inlet of the headworks and approximately the same time as effluent samples. Influent monitoring shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
Flow	mgd	Metered	Continuously
BOD ₅ ¹	mg/l	Grab	Monthly

¹ Five-day, 20° Celsius biochemical oxygen demand

EFFLUENT MONITORING

Effluent samples shall be collected just prior to discharge to the disposal ponds. Effluent samples shall be representative of the volume and nature of the discharge. Time of collection of the sample shall be recorded. Effluent monitoring shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
pH	pH Units	Grab	Daily
Settleable Solids	ml/l	Grab	Daily
BOD ₅	mg/l	Grab	Weekly
Total Suspended Solids	mg/l	Grab	Weekly
EC	μmhos/cm	Grab	Weekly

**MONITORING AND REPORTING PROGRAM
CITY OF LINDSAY
WWTF
TULARE COUNTY**

-2-

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
Total Nitrogen	mg/l	Grab	Monthly
Total Dissolved Solids	mg/l	Grab	Annually

POND MONITORING

The freeboard shall be monitored on all ponds to the nearest tenth of a foot. Pond monitoring shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
Dissolved Oxygen ¹	mg/l	Grab	Weekly
Freeboard	feet	Observation	Weekly

¹ Samples shall be collected from each pond near the outlet and analyzed for dissolved oxygen. Samples shall be collected between 0800 and 0900 hours.

Permanent markers shall be placed in the ponds with calibration indicating the water level at design capacity and available operational freeboard.

In addition, the Discharger shall inspect the condition of the ponds once per week and write visual observations in a bound log book. Notations shall include observations of whether weeds are developing in the water or along the bank, and their location; whether dead algae, vegetation, scum, or debris are accumulating on the pond surface and their location; whether burrowing animals or insects are present; and the color of the ponds (e.g., dark sparkling green, dull green, yellow, gray, tan, brown, etc.). A copy of the entries made in the log during each month shall be submitted along with the monitoring report the following month. Where the operation and maintenance manual indicates remedial action is necessary, the Discharger shall briefly explain in the transmittal what action was taken or is scheduled to be taken.

WATER SUPPLY MONITORING

The Discharger shall conduct annual monitoring of the supply water for EC. If the source water is from more than one source, the EC shall be reported as a weighted average and copies of the supporting calculations shall be included.

MONITORING AND REPORTING PROGRAM
CITY OF LINDSAY
WWTF
TULARE COUNTY

-3-

SLUDGE MONITORING

A composite sample of sludge shall be collected annually in accordance with EPA's *POTW SLUDGE SAMPLING AND ANALYSIS GUIDANCE DOCUMENT, AUGUST 1989*, and tested for the following metals:

Arsenic	Cadmium	Chromium	Copper	Lead
Mercury	Nickel	Selenium	Zinc	

Sampling records shall be maintained for a minimum of five years. A log shall be kept of sludge quantities generated and handling and disposal activities.

The Discharger shall submit annual reports containing the following:

- a. Annual sludge production in dry tons and percent solids.
- b. A schematic diagram showing sludge handling facilities and solids flow diagram.
- c. Depth of application and drying time for sludge drying beds.
- d. A description of disposal methods, including the following information related to the disposal methods used at the facility. If more than one method is used, include the percentage of annual sludge production disposed by each method.
 - (1) For **landfill disposal**, include: (a) the Order numbers of WDRs that regulate the landfill(s) used, (b) the present classifications of the landfill(s) used, and (c) the names and locations of the facilities receiving sludge.
 - (2) For **land application**, include: (a) the locations of the site(s), (b) the Order numbers of any WDRs that regulate the site(s), (c) the application rate in pounds/acre/year (specify wet or dry), and (d) subsequent uses of the land.
 - (3) For **incineration**, include: (a) the names and locations of the site(s) where sludge incineration occurs, (b) the Order numbers of any WDRs that regulate the site(s), (c) the disposal method of ash, and (d) the names and locations of facilities receiving ash (if applicable).
 - (4) For **composting**, include: (a) the location of the sites(s), and (b) the Order numbers of any WDRs that regulate the site(s).

**MONITORING AND REPORTING PROGRAM
CITY OF LINDSAY
WWTF
TULARE COUNTY**

-4-

Prior to any disposal or land application of sewage sludge, or removal of sewage sludge from the wastewater treatment plant site, the monitoring and record keeping requirements of 40 CFR 503 shall be met.

REPORTING

Daily, weekly, and monthly monitoring data shall be reported in monthly monitoring reports. Monthly monitoring reports shall be submitted to the Board by the **20th day of the following month**. Annual monitoring reports shall be submitted by **31 January of each year**.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner that illustrates clearly whether the Discharger complies with waste discharge requirements.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the discharge monitoring report.

The Discharger may also be requested to submit an annual report to the Board with tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

By **31 January of each year**, the Discharger shall submit a written report to the Executive Officer containing the following:

- a. The names, certificate grades, and general responsibilities of persons in charge of wastewater treatment and disposal.
- b. The names and telephone numbers of persons to contact regarding the facility for emergency and routine situations.
- c. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.4)
- d. A statement identifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last reviewed for adequacy.

**MONITORING AND REPORTING PROGRAM
CITY OF LINDSAY
WWTF
TULARE COUNTY**

-5-

- e. The total quantity of sludge disposed of during the previous year and ultimate disposal site(s).

All reports submitted in response to this Order shall comply with the signatory requirements in Standard Provision B.3.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

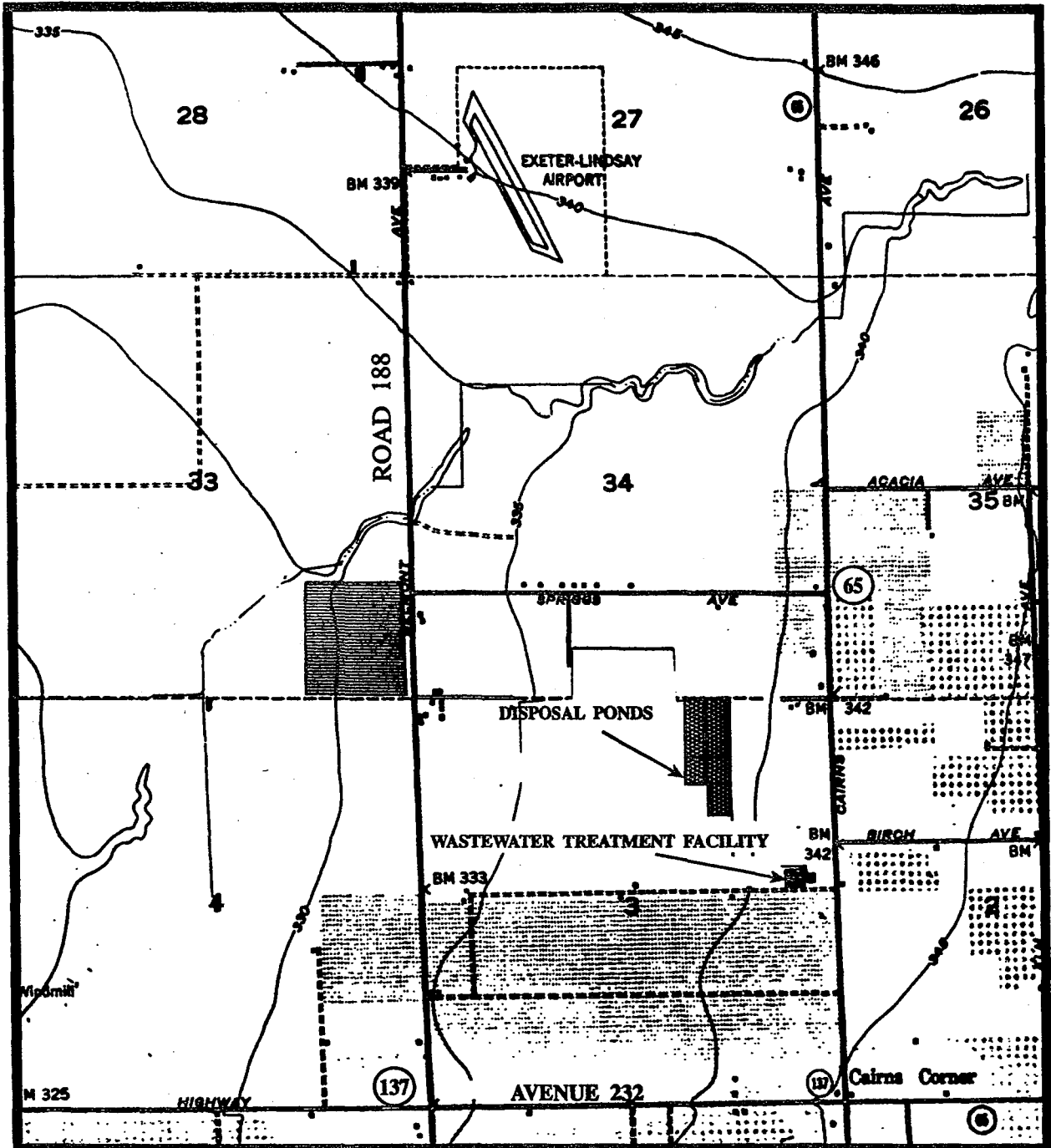
Ordered by:


GARY M. CARLTON, Executive Officer

23 October 1998

(Date)

SH:sh:10/23/98



Not to Scale

ATTACHMENT A
Vicinity Map

CITY OF LINDSAY
WASTEWATER TREATMENT FACILITY
TULARE COUNTY

Section 3, T20S, R26E, MDB&M
Cairns Corner, 7 1/2' USGS Quad, 1969

INFORMATION SHEET

CITY OF LINDSAY WASTEWATER TREATMENT FACILITY TULARE COUNTY

The City of Lindsay operates a wastewater treatment facility (WWTF) consisting of headworks, an oxidation ditch, two secondary clarifiers, five disposal ponds, an emergency storage pond, and sludge drying beds. The WWTF is regulated by Waste Discharge Requirements Order No. 93-096.

Order No. 93-096 prescribes a flow limit of 1.24 million gallons per day (mgd). Over the last few years, the flows have been steadily increasing at the WWTF. Current flows average around 1.3 mgd. The increase in flow has not caused BOD or solids violation. As a result, the City's consulting engineer has reassessed the treatment capability of the WWTF and certifies that the facility has a capacity to treat and dispose 1.36 mgd. The Discharger submitted a Report of Waste Discharge requesting change in the flow limit from 1.24 mgd to 1.36 mgd.

The Discharger also operates a separate disposal site for disposal of wastewater from a citrus juice processing plant. This discharge is governed by Waste Discharge Requirements Order No. 85-233. The Discharger has indicated that it will request revision of Order No. 85-233 to reflect additional flow from a new vegetable processing plant. Two ponds at the WWTF, excluding the five disposal ponds described above, would be used separately for storage and disposal from the vegetable processing plant. These industrial wastewater discharges will be addressed separately and not by this Order.

Self monitoring reports submitted by the Discharger shows that the specific electrical conductance at 25°C, also "EC" of the effluent is above 1000 µmhos/cm and significantly higher than the source water EC. Source water for the city is predominantly from Friant-Kern Canal, whose EC is around 30 µmhos/cm. The city also uses a small volume of water from two wells, whose EC is about 850 µmhos/cm.

Surface water drainage is to Hutchinson Ditch, a valley floor water. The beneficial uses of valley floor waters include agricultural supply; industrial service and process supply; water contact and non-contact water recreation; warm freshwater and wildlife habitat; rare and endangered species habitat; and groundwater recharge.

Based on the information obtained from the "*Lines of Equal Elevation of Water in Wells in Unconfined Aquifer*," published by the Department of Water Resources in Spring 1996, the depth of groundwater in the region is about 55 feet below ground surface.

The Visalia Area Soil Survey identifies shallow soils at the disposal area as Madera loam. The surface layer is noncalcareous loam from 10 to 18 inches thick. The subsoil is about 30 inches

INFORMATION SHEET - Continued

CITY OF LINDSAY
WWTF
TULARE COUNTY

-2-

thick and made up of calcareous clay loam over very limy clay loam and has a slow to moderate permeability. A calcareous cemented hardpan layer about 6 to 10 inches thick is encountered below the subsoil.

Annual precipitation in the area is around 11 inches and the annual pan evaporation is around 84 inches.

The action to revise waste discharge requirements for this existing facility to reflect its actual treatment capacity is a negligible expansion of its use and is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Title 14, California Code of Regulations (CCR), Section 15301.

SH:sh:10/23/98